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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/490,259 01/24/00 RAGLAND

G 002004-219

021839 QM32/0907
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EXAMINER

COMPTON, E

ART UNIT

PAPER NUMBER

3726

DATE MAILED:

09/07/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/490,259

Applicant(s)
Ragland et al

Examiner
Eric Compton

Art Unit
3726



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____

2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-49 is/are pending in the application

4a) Of the above, claim(s) 10-15, 23-27, and 37-45 is/are withdrawn from consideration

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-9, 16-22, 28-36, and 46-49 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirements

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) ☐ Notice of Informal Patent Application (PTO-152)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5

20) ☒ Other: RESTRICTION REQUEST

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DETAILED ACTION

Election/Restriction

1. Claims 10-15, 23-27, 37-41, and 42-45 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected inventions, there being no allowable generic or linking claim. Applicant provisionally traversed the restriction (election) requirement in a telephone interview on July 2, 2001 (see attachment).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 28-29, and 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,800,905 to Sheridan et al in view of US Patent 2,411,075 to Wyrick.

Sheridan et al disclose a method of forming a multilayered foil product by providing a continuous stack of metal foil layer (see Figure 10). However, they do not disclose forming a z-folded pack of the continuous stack of metal foil layers.

Wyrick discloses a method for producing a multilayer stack comprising: combining a plurality of continuous sheet material layers (6) to form an advancing continuous stack (E) of

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layers; scoring or creasing the advancing stack across a portion of the width of the stack at predetermined intervals; causing the continuous stack to fold in alternating directions at the scored or creases; and piling the alternatively folding stack in a zigzag fashion to form a z-fold pack (15) of the continuous stack of layers. See Figure 1 for more details. In this method the continuous layers are disclosed to be paper.

Regarding claim 28, it would have been obvious to one of ordinary skill in the art, at the time of invention, to have formed the multilayer metal foil stack of Sheridan et al by performing the method of Wyrick using metal foil, since these materials are all sheet materials and all have similar properties with respect to material handling as paper (e.g. folding, conveying, stacking), and therefore they can be also be automatically stacked in a multilayered fashion.

Regarding claims 29, and 33-35, Wyrick discloses a crease mechanism (I) which imparts a pattern to all layers of the stack. This can be considered an embossing process.

Regarding claim 32, the layers are all flat materials.

4. Claims 30-31 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sheridan et al/Wyrick as applied to claim 28 above, and further in view of Applicants' Admitted Prior Art (AAPA).

Wyrick discloses the invention above. However, he does not disclose providing a previously patterned metal foil layer.

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AAPA, as found on pages 1-2 and 10, paragraph 1 of the specification, discloses a variety of multilayer metal foil products that comprise metal foils having foil/fiber layers having various patterns.

Regarding claims 30-31 and 36, it would have been obvious to one of ordinary skill in the art, at the time of invention, to have performed the method of Wyrick using metal foil having a pattern thereon, in light of the teaching of AAPA, in order to form conventional continuous multilayer metal foil products.

5. Claims 46-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent US Patent 5,800,905 to Sheridan et al in view of US Patent 1,489,833 to Keller.

Sheridan et al disclose a method of forming a multilayered foil product by providing a continuous stack of metal foil layer (see Figure 10). However, they do not disclose forming a product from a z-folded pack of the continuous stack of metal foil layers.

Keller discloses a method for forming books (Q) comprising: feeding to a parts forming operation a continuous stack of sheet material layers from a z-fold pack (J) of continuous multilayer stack; and forming and cutting (K,I) individual multilayer parts (Q) from the stack. See Figure 3 for more details.

Regarding claim 46, it would have been obvious to one of ordinary skill in the art, at the time of invention, to have formed the multilayer metal foil stack of Sheridan et al by performing the method of Keller using metal foil, since these materials are all sheet materials and all have

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similar properties with respect to material handling as paper (e.g. folding, conveying, stacking), and therefore products can automatically formed from the stack.

Regarding claim 47-48, Official Notice is taken that books include text which may be typed. A typing process can be considered an embossing process.

Regarding claim 49, paper can be considered a fiber layer.

Allowable Subject Matter

6. Claims 1-9 and 16-22 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or suggest a method of forming a multilayer metal foil product; comprising providing a continuous stack of metal foil layer, separating the layers, recombining the layers, and forming and cutting individual products, in combination with the other claimed subject matter. Based on the specification a stack is disclosed to comprise z-folds (or zigzags) as shown in reference numeral (23) in Figure 1.

Prior Art References


8. The prior art references listed on the enclosed PTO-892, but not used in a rejection of the claims, are cited for their teachings of manufacturing a multilayer metal product.


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Contact Information

9. Official documents related to the instant application may be submitted to the Technology Center 3700 mail center by facsimile at (703) 305-3579/3580. Should Applicant desire to submit a DRAFT response to the Examiner by facsimile transmission, then Applicant should contact the Examiner at the number below for instructions concerning the transmission of DRAFT documents. Applicant is reminded to clearly mark any facsimile transmission as "DRAFT" if it is not to be considered as an official response.

10. Any inquiry concerning this communication should be directed to Examiner Eric Compton at telephone number (703) 305-0240.

ebc 
September 4, 2001


S. THOMAS HUGHES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

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DETAILED ACTION

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-9, 16-22, 28-36, 46-49, drawn to a method of forming a multilayer metal foil product, classified in class 29, subclass 17.1+.
 - II. Claims 10-15, 23-27, 37-41, drawn to an apparatus for producing a multilayer metal foil product, classified in class 29, subclass 33R+.
 - III. Claims 42-45, drawn to multilayer metal foil product, classified in class 428, subclass 603.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the product as claimed can be made by another and materially different apparatus such as performing the separating, forming and/or assembling manually, e.g. by hand. In addition, the product can be made by a process using an apparatus which performs the forming operation on a continuous sheet, cuts the formed sheet and adds the individual sheets to the final assembly one at a time.

Attachment

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3. Inventions I and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process which uses an apparatus which performs the forming operation on a continuous sheet, cuts the formed sheet and adds the individual sheets to the final assembly one at a time.

4. Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case process as claimed can be practiced by hand.

5. Because these inventions are distinct for the reasons given above and the searches required for Groups I, II and III are not coextensive and are not required for the other groups, restriction for examination purposes as indicated is proper.

6. On July 2, 2001, Gene Dillahunty (Reg. No. 25,423) made a provisional election with traverse to prosecute the invention of Group I, claims 1-9, 16-22, 28-36, 46-49. Affirmation of this election must be made by applicant in replying to this Office action. Claims 10-15, 23-27, 37-45 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to non-elected inventions.

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7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).